What is claimed is:

1. A vertical cavity surface emitting laser (VCSEL) comprising:

a first mirror;

an active area situated on said first mirror;

a dielectric gain guide situated on said active area; and

a second mirror situated on said dielectric gain guide.

2. The VCSEL of claim 1, further comprising:

a substrate; and

wherein said first mirror is situated on said substrate; and

said substrate comprises InP.

3. The VCSEL of claim 2, wherein said dielectric gain guide is for current confinement.

4. The VCSEL of claim 3, wherein said dielectric gain guide comprises a material from a group of SiO_2, TiO_2, SiN, and the like.

5. The VCSEL of claim 1, further comprising:

a substrate; and

wherein:

said mirror is situated on said substrate; and

said substrate comprises GaAs.

6. The VCSEL of claim 5, wherein said dielectric gain guide is for current confinement.

7. The VCSEL of claim 6, wherein said dielectric gain guide comprises a material from a group of SiO_2, TiO_2, SiN, and the like.

8. A method for making a gain guide for a VCSEL comprising:

forming a first mirror on a substrate;

forming an active region on said first mirror;

forming a dielectric gain guide on said active region; and

forming a second mirror on said dielectric gain guide.

9. The method of claim 8, wherein the dielectric gain guide comprises a material from a group of SiO_2, TiO_2, SiN, and the like.

10. The method of claim 9, wherein the first and second mirrors are distributed Bragg reflectors.

11. The method of claim 10, wherein the first mirror is at least nearly lattice matched to the substrate.

12. The method of claim 11, wherein the substrate comprises InP.

13. The method of claim 11, wherein the substrate comprises GaAs.

14. A means for providing laser light comprising:

first reflecting means, situated on a substrate, for reflecting light;

active means, situated on said first reflecting means, for converting current to light;

confinement means, situated on said active means, for confining current; and

second reflecting means, situated on said confinement means, for reflecting light; and

wherein said confinement means comprises a dielectric.

15. The means of claim 14, wherein said first means for reflecting comprises a material that is at least nearly lattice matched with the substrate.

16. The means of claim 15, wherein said active means is at least nearly lattice matched with said first means for reflecting.

17. The means of claim 16, wherein the substrate comprises InP.

18. The means of claim 16, wherein the substrate comprises GaAs.

19. A laser source comprising:

a first reflector;

a cavity situated on said first reflector;

a layer of dielectric, having an opening, situated on said cavity;

a second reflector situated on said layer.

20. The source of claim 19, wherein said first reflector is situated on a substrate.

21. The source of claim 20, wherein said first reflector is at least nearly lattice matched with the substrate.

22. The source of claim 21, wherein the laser source has an InP based structure.

23. The source of claim 21, wherein the laser source has a GaAs based structure.

24. The source of claim 21, wherein said layer comprises at least one material of a group of SiO_2, TiO_2, SiN, and the like.